

Weekly Discovery

We SHARE to inspire and ignite ideas!

8 May 2017 - 12 May 2017

ARCHITECTURE

The World's 20 Largest Architecture Firms



Check out the top 20 largest architecture companies in the world. Our homegrown local <u>DP architects</u> which has 767 architects under its wing is ranked at number 10.

Source: ArchDaily (8 May 2017)

ARTIFICIAL INTELLIGENCE

Singapore will spend \$107m to be a force for AI in the next 5 years. It's just in time.



Singapore will soon usher in a new era of Al with the Government's largely-funded initiative Al.SG, which aims to engage various local parties in Al research, development and application.

Source: Tech in Asia (4 May 2017)

BIOMIMICRY

Gecko-Inspired Adhesive Sticks And Releases On Command



A new kind of adhesive that can stick to any wet or dry surface. This could be applicable to underwater robotics. Read more at <u>Journal of Physical Chemistry C</u>.

Source: Asian Scientist (10 May 2017)

BIONICS

This Bionic Hand Uses AI to Grab Things Automatically



To achieve more advanced prosthetics, scientists attached a camera to a bionic hand that enables the seeing-hand to grab an object 10 times fasters than the existing prosthetic limbs. Learn more at IOP.

Source: Motherboard (4 May 2017)

ENERGY STORAGE

2-In-1 Solar Charger Both Captures And Stores Energy



A new solar device that can be fully charged within 2 minutes and is able to store energy as well. Read more at Environmental Science.

Source: Asian Scientist (8 May 2017)

ENTREPRENEURSHIP

The 21st Century Demand for Creative Entrepreneurship, and How to Take Advantage



Some notable tips for entrepreneurs to stay in the game. This includes, doing things that are not the "norm", converting people obsession to business ideas and to capture ideas anytime, anywhere.

Source: Entrepreneur (8 May 2017)

GOOGLE EARTH

This Is How Google Captures the Entire Earth in 3D

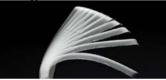


Google Earth provides 3D images of the entire world and gives the feeling of going on a holiday. Watch an 8-minute video on how these images are captured.

Source: Popular Mechanics (7 May 2017)

MATERIALS

Researchers create shape-memory aerogels with rubber-like elasticity



Read about polymeric aerogels that are both superelastic and have exceptional shape memory. It can be reshaping and cooled to maintain a new form and will return to its original shape in room temperature. Read more at Chemistry of Materials.

Source: Phys.org (3 May 2017)

MOBILITY

Ride together, but alone in your private pod in the car of the future



The future of mobility envisions autonomous vehicles as a public platform that takes people and items around in cities, making mobility more efficient and cost-saving.

Source: Mashable (6 May 2017)

SOCIAL INFRASTRUCTURE

Civic Lesson: New Social Infrastructure



Reimagining the Civic Commons is an initiative that has invested in 5 cities to upgrade existing infrastructure to foster social cohesion. Examples include a bridge that links 2 neighbourhoods and modifications to existing buildings to promote shared activities. Read more at Design of the Public Realm

Source: <u>Architectural Record</u> (1 April 2017)

TOUCH SCREEN

High-Tech Spray Paint Can Make Anything Into a Touchscreen



Carnegie Mellon University researchers have enabled any surface to be a 'smart' surface via software and a can of spray paint. Known as Electrick, it uses an algorithm to read the touch of your finger through the differential flow of electricity across the conductive surface.

Source: Popular Mechanics (8 May 2017)

WOOD ARCHITECTURE

Living with wood: Developers go big on wood architecture



The timber age is coming, as wood structures become increasingly popular worldwide. Hear from our very own Assistant Professor Michael Budig about the forefront of wood architecture in Singapore.

Source: <u>The Straits Times</u> (6 May 2017)